

REMARKS

In response to the Office Action mailed September 21, 2004, the Applicant respectfully requests reconsideration in view of the above claim amendments and the following remarks. The claims as presented are believed to be in allowable condition.

Independent claims 1, 10, and 18 have been amended. Claims 1, 10, and 18 have been amended to recite that the a intermediate communications gateway establishes communication with a hard disk drive to retrieve the data relating to the hard disk drive for communication via a bus while at least one control line is in a second state and while the hard disk drive is isolated from the bus. Support for these amendments may be found in Fig. 5 and on page 11, lines 9-29. No new matter has been added.

Claims 1-8 and 18-25 are rejected under 35 U.S.C. § 102(b) as being anticipated by Chan et al. (U.S. Patent 6,038,624, hereinafter "Chan") and under 35 U.S.C. § 102(e) as being anticipated by Sakarda et al. (U.S. Patent 6,594,721, hereinafter "Sakarda"). Claims 9-17, and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan in view of widely used standard system bus embodiments, and further in view of Lichtman (U.S. Patent 5,787,246). Claims 9-17, and 26 are also rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakarda in view of widely used standard system bus embodiments, and further in view of Lichtman.

I. Prior Art Rejections

Claim Rejections Under 35 U.S.C. §102(b)

Claims 1-8 and 18-25 are rejected under 35 U.S.C. § 102(b) as being anticipated by Chan. This rejection is respectfully traversed.

Amended independent claims 1, 10, and 18 specify a bus having a plurality of lines including at least one control line. The bus is in communication with a hard disk drive. A host controls a state of the control line such that communication with the hard disk drive via the bus is supported while the control line is in a first state and communication with the hard disk drive is suspended while the control line is in a second state. An intermediate communications gateway disposed between the bus and the hard disk drive is responsive to the state of the control line and permits communication between the host and the hard disk drive while the control line is in the first state. When the control line is in the second state, the intermediate communications gateway isolates the hard disk drive from the bus. Furthermore, while the control line is in the second state, the host and the intermediate communications gateway cooperate to communicate data relating to the hard disk drive via the bus. The intermediate communications gateway establishes communication with a hard disk drive to retrieve the data relating to the hard disk drive for communication via a bus while at least one control line is in a second state and while the hard disk drive is isolated from the bus. (Emphasis supplied.)

As discussed in Applicant's previous response of 6/10/2004, Chan discloses a computer system (Fig. 2) for reinitializing various system peripherals (such as IDE devices) after being hot-swapped. The computer system taught by Chan includes establishing correct master/slave relationships for each IDE device after the devices have been powered down, restarted, and reset (Col. 1, lines 10-36). The insertion or removal of an IDE device from the computer system generates an interrupt and causes the computer system BIOS to put any existing devices to sleep, power off existing IDE devices, resetting the devices, and powering up the devices in a new configuration (i.e.,

establishing new master/slave relationships). Col. 4, lines 62-67 through Col. 5, lines 1-13.

Chan, however, fails to teach, disclose, or suggest an intermediate communications gateway which establishes communication with a hard disk drive to retrieve data relating to the hard disk drive for communication via a bus while at least one control line is in a second state and while the hard disk drive is isolated from the bus, as specified in amended independent claims 1, 10, and 18. As discussed on page 18 of the Office Action, Chan discloses that "a plurality of flip-flops 341-348 store configuration data for physical drives A and B and for the primary and secondary channels." In the Office Action, it is alleged that the aforementioned flip-flops function as a "gateway" for communicating the stored configuration data when the hard disk is isolated. However, Chan fails to disclose that the gateway communicates with a hard disk to retrieve data relating to the hard disk for communication while the hard disk is isolated. Furthermore, as discussed above, Chan discloses that during a second control state (i.e., during a system reset) existing IDE devices are powered off. Such a state would prevent communication with the hard disk for the retrieval of data relating to the hard disk as recited in amended claims 1, 10, and 18.

For at least the aforementioned reasons, claims 1, 10, and 18 are allowable over Chan. Claims 2-8 depend from claim 1 and claims 19-25 depend from claim 18. Therefore 2-8 and 19-25 claims are allowable for at least the reasons discussed above with respect to amended independent claims 1 and 18 in addition to the additional features recited therein. Accordingly, for at least the aforementioned reasons, the rejections of claims 1-8 and 18-25 should be withdrawn.

Claim Rejections Under 35 U.S.C. §102(e)

Claims 1-8 and 18-25 are rejected under 35 U.S.C. § 102(e) as being anticipated by Sakarda. This rejection is respectfully traversed.

Sakarda discloses a computer system for the identification and configuration of peripheral devices, which are inserted and removed (i.e., hot swapped) from a bay in the computer system. The system includes a secondary bridge connected through a PCI bus and a host bridge. A peripheral device bridge is connected to the secondary bridge. The peripheral bridge is connected to a number of bays which connect IDE devices such as hard disk drives. See Col. 4, lines 23-46. The peripheral device bridge identifies the bay into which a peripheral device is inserted or removed. If a device is inserted into a bay, a device driver identifies the device and permits communication between the device and the operating system in the computer system. See Col. 5, lines 2-9.

Sakarda, however, fails to teach, disclose, or suggest an intermediate communications gateway which establishes communication with a hard disk drive to retrieve data relating to the hard disk drive for communication via a bus while at least one control line is in a second state and while the hard disk drive is isolated from the bus, as specified in amended independent claims 1, 10, and 18. As discussed on page 18 of the Office Action, Sakarda discusses that a plurality of bits in a docking station may implemented to define a change in the docking status of an IDE device. However, Sakarda fails to disclose a gateway which communicates with a hard disk to retrieve data relating to the hard disk for communication while the hard disk is isolated.

Claims 2-8 depend from claim 1 and claims 19-25 depend from claim 18. Therefore 2-8 and 19-25 claims are allowable for at least the reasons discussed above

with respect to independent claims 1 and 18 in addition to the additional features specified therein. Accordingly, for at least the aforementioned reasons, the rejections of claims 1-8 and 18-25 should be withdrawn.

Claim Rejections Under 35 U.S.C. §103(a)

Claims 9-17, and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan in view of widely used standard system bus embodiments, and further in view of Lichtman. Claims 9-17, and 26 are also rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakarda in view of widely used standard system bus embodiments, and further in view of Lichtman. Claims 9 depends from amended independent claim 1 and thus includes at least the same features of claim 1.

Claims 11-17 depend from amended independent claim 10 and thus include at least the same features of claim 10 in addition to the additional features specified therein. As discussed above, neither Chan nor Sakarda teaches, discloses, or suggests the features specified in independent claims 1, 10, and 18 as well as in dependent claims 9-17 and 26. The "widely used standard system bus embodiments" relied upon to cure the deficiencies of Chan and Sakarda disclose an alleged widely-known and practiced bus standard for communicating with IDE devices. Lichtman, as alleged in the Office Action, discloses device configuration for a system bus. However, neither the "widely used standard system bus embodiments" nor Lichtman, however, teaches, discloses, or suggests an intermediate communications gateway which establishes communication with a hard disk drive to retrieve data relating to the hard disk drive for communication via a bus while at least one control line is in a second state and while the hard disk drive is isolated from the bus, as specified in amended independent claims 1, 10, and 18. Therefore the Applicant


respectfully submits that the combined teachings of Chan in view of widely used standard system bus embodiments, and further in view of Lichtman and Sakarda in view of widely used standard system bus embodiments, and further in view of Lichtman does not make obvious Applicant's claimed invention as embodied in claims 9-17, and 26 for at least the aforementioned reasons. Accordingly, the rejections of claims 9-17, and 26 should be withdrawn.

CONCLUSION

For at least the aforementioned reasons, the Applicant asserts that the pending claims 1-26 are in condition for allowance. The Applicant further asserts that this response addresses each and every point of the Office Action, and respectfully requests that the Examiner pass this application with claims 1-26 to allowance. Should the Examiner have any questions, please contact Applicant's undersigned attorney at 404.954.5035.

Respectfully submitted,
MERCHANT & GOULD

Date: January 13, 2005



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